



Fort Lewis Energy Program

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Fort Lewis, Washington



A map of the state of Washington, colored in a light tan shade. The state's coastline is visible on the left, with the Pacific Ocean in light blue. Three specific locations are highlighted with darker tan shading and labeled with callout boxes. The callout boxes are grey with a gradient and a pointer indicating the location. The text inside the boxes is in a blue, serif font. The locations are: Fort Lewis (southwest), McChord AFB (northwest), and Yakima Training Center (east-central).

McChord AFB

Fort Lewis

Yakima Training
Center

An aerial photograph of Fort Lewis, showing a large military installation with various buildings, roads, and surrounding greenery. The text is overlaid on a semi-transparent grey box.

FORT LEWIS

86,000 Acres

40,000 Troops / Employees

3 Combat Brigades / 1st Corps

1,930 Buildings

17.2 Million Square Feet

***Heating accomplished by NAG / NAG
to Steam***

Yakima Training Center (YTC)

- ❖ Yakima Training Center (Sub-installation) – 323,500 acres
- ❖ 500 Employees
- ❖ 200 Buildings
- 790K Square Feet



ENERGY DATA FORT LEWIS & YTC

FY 2006 Consumption

***Electric 210,426 MWH (36%)
Natural Gas 1,125,072 MBTU (56%)
Oil 157,000 MBTU (8%)***



PROGRAM

- **Conservation**

- **ESPC**

- **2002-2020 - Johnson Controls DDC for Barracks**
 - **2007 (Planned) - ESPC with FEMP (or) UESC with Bonneville Power**

- **Small Power Projects**

- **Solar Wall (Commissioning)**
 - **Mini-Hydro (Planning)**
 - **Landfill Gas Reuse (Design)**
 - **Solar Roof (Planned)**



PROGRAM

- **Conservation**
 - Fort Lewis Energy Reg. FL 11-1
 - Unit Inspection / Training Program
 - Recycling (Goal) – No waste departs Fort Lewis
- **Installation Sustainability Program**
 - 1,5,20 year Energy goals
 - Teams formed: Address metering / energy conservation issues
 - Goal: 100% Renewable Energy by 2025



PROGRAM

- **BRAC: Joint Base Lewis McChord (JBLM)**
 - **Fort Lewis + YTC + McChord AFB= JBLM 2007**

	Electric MWH	Electric/MBTU	NAG/ MBTU	Oil/ MBTU	Total MBTU
Fort Lewis	210,426	718,003	1,125,072	157,700	2,000,775
McChord	97,038	331,107	344,092	19,596	694,795
Total	307,464	1,049,111	1,469,164	177,296	2,695,571

- **All Energy Initiatives will address JBLM**
 - **ESPC / Metering / Studies**



PROGRAM

- **Renewable Energy Study**
 - **Renewable Energy Study-JBLM**
 - **Fort Lewis: Micro-Hydro / Biomass / Solar**
 - **YTC: Solar / Wind**
 - **McChord AFB: Biomass / Solar**
 - **Goal: 100% Renewable Energy by 2025**
 - **RFP (in design)**
- **RECs ~ 21% of Renewable Energy (FY07 –FY10)**



PROGRAM CHALLENGES

- **Joint Base Lewis McChord Merger**
- **Construction**
 - **Standardized USACE RFP**
 - **Limited input from Garrison**
 - **Stick wood construction**
 - **Close 25 Year Horizon**
 - **Modular Construction**
- **Troop Deployments**
- **Lack of Electrical Metering**
- **Computer Energy Conservation**



Thanks

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